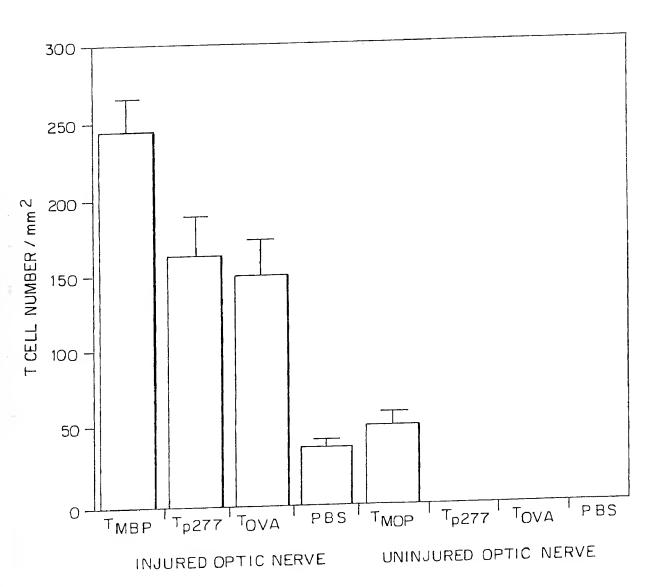
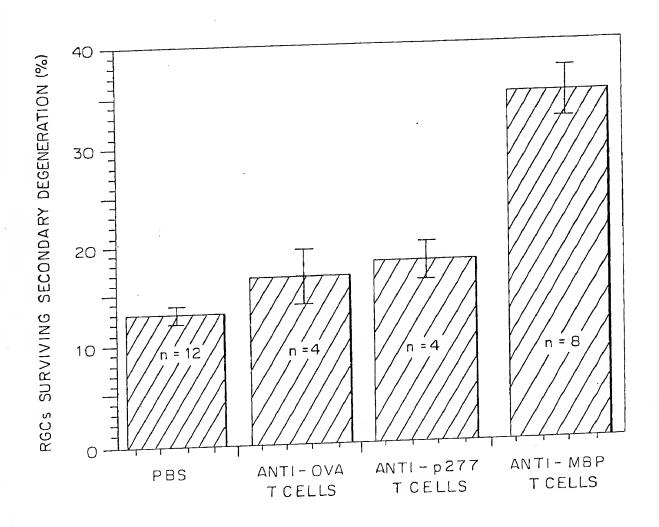
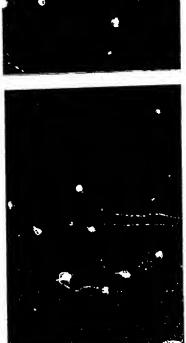
F/G. 1



F16.2



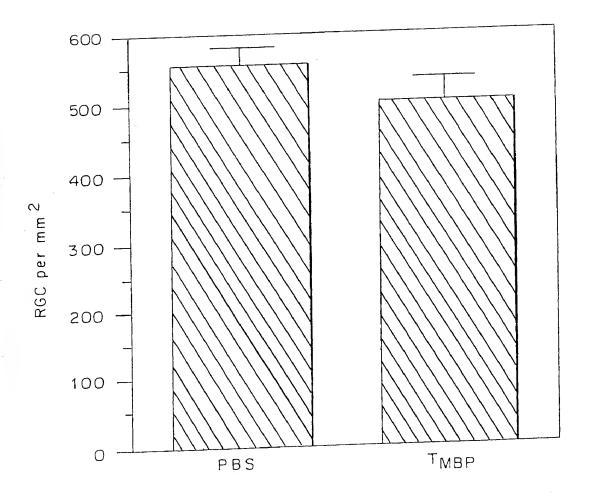
F16.3C F16.3B F16.34



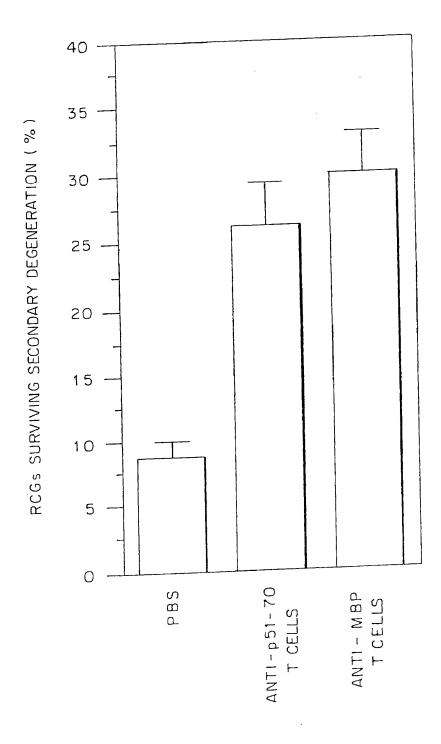




F1G.4B

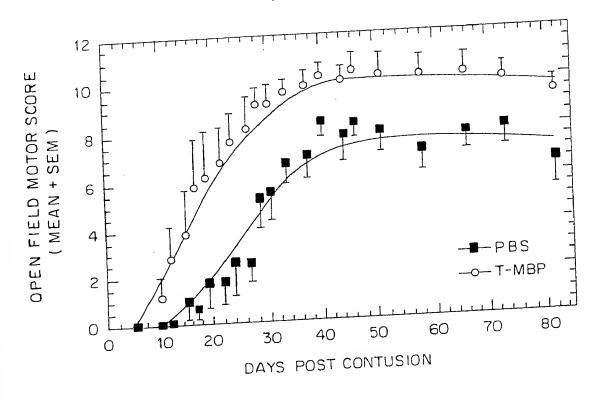


F1G.5



F1G.6B FIG. 6A 14000 4000 12000 MEAN CAP AMPLITUDE (µV) MEAN CAP AMPLITUDE (µV) 3000 -10000 8000 2000 -6000 4000 -1000 2000 -0 PBS TMBP 0 PBS TMBP UNINJURED OPTIC NERVE INJURED OPTIC NERVE

FIG. 7A



F1G. 7B

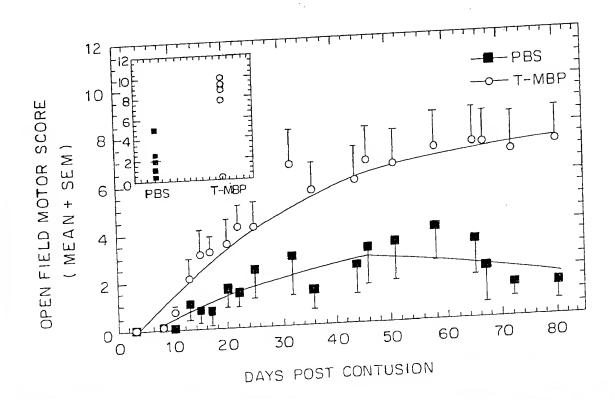
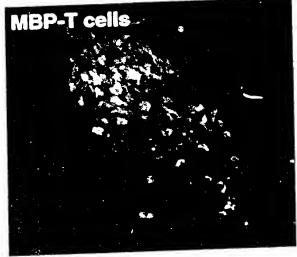
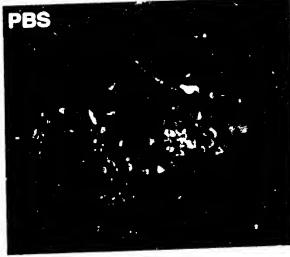


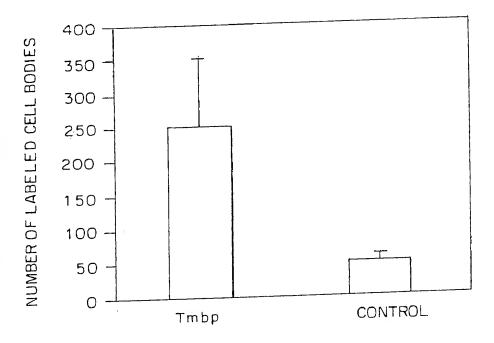
FIG.8A

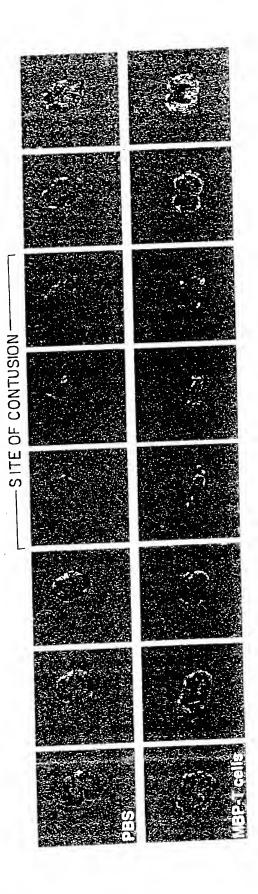
F1G.8B





F1G. 8C





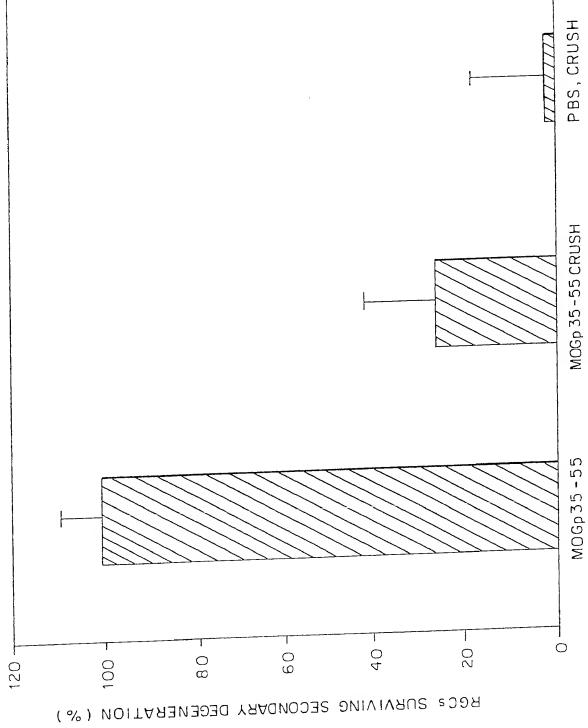
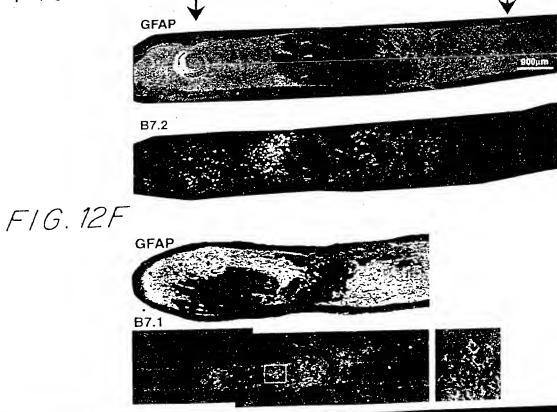
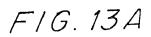


FIG. 12A FIG. 12B

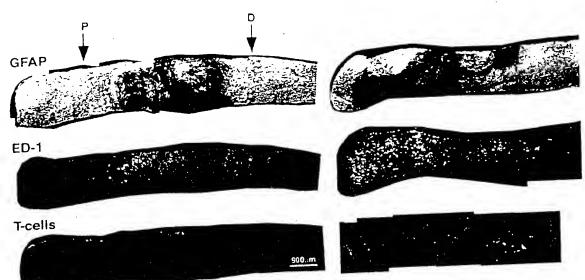
FIG. 12C FIG. 12D

FIG. 12E Proximal Distal





F1G.13B

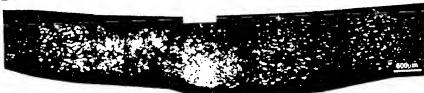


F1G. 13C

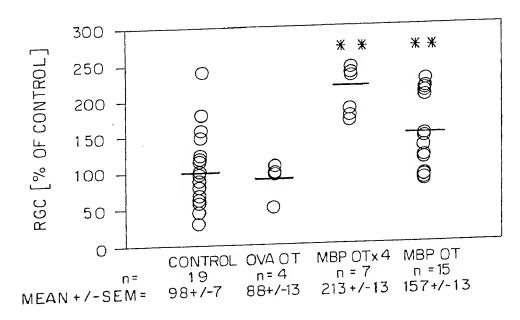
GFAP



B7.2



F1G.14



EXPERIMENT GROUP

F1G.15

C 1	ctcacagega tggcttcctc	cacggateca ccaaggcaca qqtgcgccca	gagacacggg agcggggctc	cctggatgtg cacagcaagt catccttgac tggcaaggac	atggcatcac accatggacc tccatcgggc tcacacacaa gaaaacccag caaggaaagg	gaactaccca tagtccactt
241 301 361 421 481 541	ctacggctcc cttcaagaac gtccctcagc acgctgagag gccttaaacg cccgtggggc	attgtgacac agatttagct cctccctgct tttaattcta tgtgaacgcg	ctcgtacacc ggggaggaag cagccttccc	ccctccatcc agacagccgc gaatcctgcc	caaggaaagg tctggatctc ctcggcttct agagcagacc ctgactggct	ccatggcaag taatataact ctctcttaat
601	gtcccttttt	ac				

F1G.16

			P10.	10		
1 61 121 181 241 301 361 421 481 541 601 661 721 781 841 901 961 1021 1321 1381 1441 1501 1561 1621 1681 1741 1801 1861 1921 2041 2041 2101	treetecaa gacagget cactatetea gacagget cactatetea ggaggeagag ggcaagaget gctaaaacg ggcaacaget gaggeacaget gaggeacaget gaggeacace gaggacget gaggeacace gaggacget gaggacget gaggacget gaggacget gaggacget gaggacget gaggacget gtgcaacag ctcggaacage ctcggaacage gtgcaacag gtgcaacag gtgcaacag gtgcaacag gtgcaacag ccaattatag gatagcetea gtgcaacag ccaattag ccaattag gatagcetea gtgcaacag ccaattag ccaattag gatagcetea gtgcaacag ccaattag ccaattag ccaattag ccaattag gataaccgg cacetea gacaaagge cacetea aaggacgetea caatgagaca ccaaaagagaca ccaaaagagaca ccaaaagagaca atgccaaaaac ccaaaagagaca accaaaaac atgccaaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac atgccaaaac accaaaac atgccaaaac accaaac accaaaac accaaaac accaaac accaaac accaaac accaaac accaaac accaaac accaaac accaaac accaaac accaaac accaaac accaaac accaaac accaaac accaaac accaaac accaac accaac accaac accaac accaac accaac ac	gaccaaagaga cgcaaaagaga cgccaaagaga cgccaaagaga cgccaaagaga cgccaaagaga cgccaaagacattt cgaaaaaccaa caattgagaaa ttcctcattgagaaattcacaa acattgagaaa taaattgagaaa acattgagaaa acattgagaaa acattgagaaacaga gagaatcaacag aagtcataattacaa cgcaattaacta cgaattaacta cgaattaacta cgaattaacta cgaattaacta cgaattaacta cgaattaacta cgaattaacta caattaacaa aaattttaa aaattttaa	cgagagcctg cctggcaca cacgggcatc ggagtcacac gagctcacac gacgcctcgc tagctgggg taaatcgggg ttaaatcgggg ttgccctgt cgtagtacaca cgcatgaggg ttgccctgt cgtagtacaca cgcatgaaaaca cgcatgttcacc gatgttcacc gatgaaaaca cgcattttggg ttgcgagag ttgtgggcagag tgtgcccaga agggtcttca gagagcctgc cgtagaaaca ttgcgggcagag cgtgcagag cctccaaga accagccgg gcggcagtgc cctccaaga accagcctg cctccaaga	gatgtgatgg gcaagtacca cttgactcca aaggactaccc acaggactccc gcacacccc cacagggat aatcctaatcc ggaagggat aatcctaatcc gaaaagggtt ccacaggctt cctcaatggctt cctcatgacct gaaaacctatt catgaccagg ttttgaccacag ttttgaccaat tttgaccaag tggaggttcca ggaggatt cccaggaggt ttggcacaggg tgggaggt tgggaggt tggggggcca acaggggatt ccagggaggt tggggggcca gacggggacca gacgggacca gacgggacca ttttaggcca cagggacca caggacca caggacc	togggcgctt accaccaggc accaccagga agatcaaaaa agatcaagga tcaaggaagt tcaagatcagct tcagcagct tcagcagct tcagcagct tcagcagct tcagcagct tcagcagct tcagcagct tcagcagct tcagcagct tcaggact tcagagact tcaccagac tcaccac tcaccagac tcaccagac tcaccac tcaccagac tcaccac tcacc tcaccac tcacc tcaccac tcaccac tcaccac tcaccac tcaccac tcaccac tcac	aagactget caagaga attagecate teagecate agacacac tegged attaged
2101	acactgitte	Lgaacaca ₃				

F1G.17A

61 121 181 241 301 361 421	taatatctag ttgtgctgca ttcattttat caggcaagcc cagaaagaga gaggagaagg tgtcaatcag agtaaaagac ccacaaagca gtttcaaaaa	ttccaccctc ttagggaaaa agatggagcc ggaggaggag aaagcccttt cgaagaagga	aatccacatt aaggaaaaac cttagagaag aggaggagga tcattgcagg ggctggagag	tccagatgtc aaagaaaatg ggagtatccc aagcaggcct agaagaggac accaggatcc ttggagtcag	aaacaattgg tgagtaggtg gtccctttaa aaagatactc ttccagctga agtcccaaaag	cagtgaaagg gggaaaaggg gggggttggc agagagaaaa
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F1G.17B

FIG. 17C

F1G.17D

1 gatectecte attettecce tacceattee ecceaceete egttataetg gggecagtta 61 totagtagat actgccaatt accettggca gaggtgccct gctcactaat tttatttggg 121 ggagmgccct ggaacctggt tttaatgtct ggcacacgcc acttccagga tctcccagtt 181 tgtgtttcta catctgcagg ctgatgctga tttctaacca acccatgtca atcattttag 241 tttgtgggca tcacctatgc cetgaccgtt gtgtggetce tggtgtttgc etgetctgct 301 gtgcctgtgt acatttactt caacacctgg accacctgcc agtctattgc cttccccagc 361 aagacetetg ceagtatagg cagtetetgt getgatgeea gaatgtatgg tgagttaggg 421 tacgggtgct ttggctctcc tacccactat ggaagcacta tatatttggt tattttctta 481 gtgtaaggag ggtggtgatt atgagaaaaa tataagatga tgaatgattg ggtcttagtt 541 tattaateet teeetaetga aaccagagag gtttetteee eeggaaggga aettggaagt 601 ggtgggagtt ttcttggcca ttcacattgg cctactctag ttgactgctg ttcacaaccc 661 caaagcagca catttcaata acaaacacaa ggttdsacca ctgttcaata ccaccttctc 721 ttttttgtaa acctgtagaa aagaggatee taattgttgg tagmateeaa mtttacagee 781 aggataatta gagatggaag aagggctctg ggggaaagtc tccatgtggc cccgtaactc 841 cataaagett accetgettg etttttgtgt ettaettagg tgtteteeca tggaatgett 901 teectggeaa ggtttgtgge teeaacette tgteeatetg caaaacaget gaggtgagtg 961 ggttatttgg gttattttac aagggagtag ctaataccat acaaattaca cccatggcct 1021 tcaattttaa ggactgaaag tttccctttg ctggattttg aattagccga ttgccttcta 1081 caacatgttg gctaagtgtg cctgagccaa tgagcataga aggtaaaaca cctcttttct

F1G.17E

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F1G.17F

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FIG. 18A

1 atggaaatgt tetgtatttg tgttgtetga tgagataace actaactgta gtgetattga 61 gcatttgaaa catggctagt gtaatcaatg aaccaaattt ttaattttat ttaattgtaa 121 ttaattttaa gtggccacat gcagggagtg actgctgcat tggacagcac ggctctaaat 181 tgagcctttt ttccttattt ggtgaggcat acttgcctta agattgggaa gtctattttt 241 ggaacctgct accaatgctg gtctcacact tgcaattctc agctgagcca agaggtgaga 301 gaaaggtcat tttccattcc aagatctcac tctcccctgt gacactgagg aaactggcaa 361 gtgatgtgaa ggctggagag cgtgtcctgt atgctggctc tgtcccttct gcctgtgttg 421 actgacatag ttagttgctg cccttgctgg tctcccttcc tccaaccttg cctctctgag 481 cacacetgae atteatetea tgaetteeet aaaaacatte tttgggaaca agaaaetaae 541 aaatcccaag tgacctatca catatacaaa catacagggc agagtttgga ttcgcggtag 601 aagaaaggga ggttagacat taagaagaat ggtctggtga tgacagttgt gagataatag 661 aaacaggaaa aagaaatcta agttttcttt ctttttttaa gaaccaataa taatttctct 721 cttttgacta gtcagtaggg ctggggtgga ttggaggaag cttacatatt ccatgaacaa 781 gcctcttcct aaggtcctgt aagtgatcct gccccactga ttagccccta gaagaccctt 841 caaaggttgg atctccagga gggagtgggg gaggaaagcc ctgtaccagg cagcetctgc 901 tocattgoto tgggggggtg gggaagacaa accotggtoa tocootcagt otgtagooot 961 tttgtgtgag tgcctggcaa gggtgacgtg gggctgtttc tgcgggcaca gctgcagcaa 1021 ttaccggagt ggaggcaggg cccaggcagc actgccctcc aagatettec ettgggettt 1081 tcagcagtaa ggggacatgc accccaaggg cetecaettg geetgacett getgeggggg 1141 ctctctgtcc ccaggaacag tagagatggc aagcttatcg agaccctctc tgcccagctg 1201 ectetgetec tteetectee tectecteet ceaagtgtet tecagetatg caggtaagae 1261 atgtttttt teetgeeetg gggagaeeet gaaaacagaa aggetagttt eetgggggtt 1321 ageteettea aacateetea agttggtata ttatetttet aaaacataga eetaetgaea 1381 tgcctccctt cctcagaaac cttccgtggg tggttcttac agccttcaag atggagtcca 1441 gactetttt tttttttggg acagagtete eetetgttge teaggetgga gtgeagtgge 1501 atgatetegg eteactgeaa eeteageete eetggtteaa gegattetee tgaettggee 1561 teccaagtag eggagaetae aggegeetge eaceaeaeee agetaaattt gttettttet 1621 ttctttttt tttttttgg gattttagga cagacggggt ttcacatgtt ggccaggatg 1681 gtctcgatct cttgacctgc tgatccgccc gcctcagctt cccaaagtac tgggattatg 1741 ggcgtgagcc actgcactag gcctaatttt tttattttta gtagagatgg ggtttcacca 1801 tgttggccag gctggtctgg aacccctgac ctcaagtggt ctgccctcct cagcctccca 1861 aagttetgag attacaggea tgagecattg egtetgacee agaeteetta atgtgaetaa 1921 ctccaggett teettggact acttettact tgtettteea getttgtett ttcacetete 1981 caattgagat aaaataataa caacctcttg gagttctcat caggattaca tgaaatgaga 2041 tatgtaacat gcttagcagt gcctgtccat agtaaatctc aataaatgtt tgtggaatta 2101 taatatettg teatgtttga gaetttgete tgeataatea ggeaceagta ggtttttata 2161 aaggaacccg tctgtcacgt gcagaggaga aataaacaga aagtttccca tcctcaggga 2221 gccacctgac tgacagaggc acagtgcatc cactctccag gtctagggga gaaagcagcc 2281 ttatttctta gtagctcaga atctgacttg agaaacacat ccacatagaa aaaaacaagg 2341 aactttttcg ggtcagggtc cgggacccac agtgaggtgg aagatacagg ggaaggaaga 2401 gggaaataga gccatcccca gggtggaaga tctcagaaga gaatttggga aacaaggtat 2461 gaacaaggac tgaatagtga gaagtgatgg agagacagct aaagtagatg gagtgtcaaa 2521 accaaaacct ctaagggtag aataggcagc aatttggcca agtcctaaca gggaggccca 2581 taggaggatt caacetcaag atgetgtgee acattecaag agggaaceta aaggetggge 2641 tgaagagtca gagatggcta cagctggcaa aaagatgggc agatgctgag aggagatgat 2701 tgctaaaatg ttctgtccag gacattcaca gtatctctat aaccagagtc ttttttgtcg 2761 ttgttgttct caagaaggaa acttgaggcc gggtgtggtg gtttatgccc ataatcccag 2821 cgctttgggg ccaaggcagg cggatcacct gaggtcagga gttcgagacc agcctggcca 2881 acagtgtgaa acctcatctt tactaaaaat acaaaaatta gctggatgcg gcggtaggtg 2941 cctgtaatgc cagctactcg ggaggctgag gcaggagaat cacttgaacc tgggaggcgg 3001 aggttgcagg gaggcggagg ttgcagtgag ccaagattgc accactgcac tccagcctgg

FIG. 18B

3061 gcgacagaga gtaagactgt ctcaaaaaat aaatgaataa ataaaaagga agaagaagaa 3121 gaagaacaat tgcaatcctc cctggctcta gaatgtcatt taaaagtcga gtgtcttctt 3181 ccttccctgt tttgaagcag cccttctcat gacaggcttg cttgccaagg ttccctctga 3241 ccttaaatct cttccttttg gtgtcttgga cagggcagtt cagagtgata ggaccaagac 3301 accetateeg ggetetggte ggggatgaag tggaattgee atgtegeata teteetggga 3361 agaacgctac aggcatggag gtggggtggt accgccccc cttctctagg gtggttcatc 3421 totacagaaa tggcaaggac caagatggag accaggcacc tgaatatcgg ggccggacag 3481 agctgctgaa agatgctatt ggtgagggaa aggtgactct caggatccgg aatgtaaggt 3541 teteagatga aggaggttte acetgettet teegagatea ttettaceaa gaggaggeag 3601 caatggaatt gaaagtagaa ggtgagtagt gccatataat attaggtatt aactgttggg 3661 tggccaagaa caattattet etcaactgag atgagateee teaacecaaa cateteagte 3721 ctgggaatga tttccataaa aatgtacaca tcaataaaca gaaactcatg cttagggatg 3781 tetgttgeat cattatteag agtageaagg aaattgggat caaaateaat geetttgagt 3841 aggtaagtga cagaatgaac aatggtagcc atactgtgaa tattatgcag ggattaaaaa 3901 gattatttta gcactaggcc agatggtttg gggggctcct ctaaggtatt attgagtgat 4021 ctcgcagcta ctcaggaggc tgagacggga ggctggcttg agcccagggg tttgcagtta 4081 cagtgageta tgattgcace actgcactee aaccegggtg acagageaaa gacetteace 4141 cccactccct acccgtctct aaaaaaaaca aaaacaaaaa caaaaaaacc cttgggccca 4201 gcgccgtggc tcacgcctgt aatcccagca ctgtgggagg ccgaggtggg cagatcacaa 4261 ggtcaggaga tcgagaccat cctggctaaa acggtgaaac cccgtctcta ctaaaaatac 4321 aaaaaaaaa aaaaattta gccaggcatg gtagcaggcg cctgtagtcc cagctactcg 4381 ggaggctgag gcaggagaat ggcgtgaacc cggaagcgga ggttgcagtg agccaaaatc 4441 ettecactge actecageat gggggacaca gegagaetee gtetcaaaaa aaaaaaaaa 4501 accetgtatt tgtgagegea cacacacaca cacacacaca cacacetgtg ettggteeta 4561 gtgaataagc aagtaaatca aatgtctaaa tataattata gaaaggagat gtcacctttt 4621 ggctgtacct ccactatttc attctgcaga attgcagaat ttctttttt tttcctttct 4681 ttcttttctt tttttttttg acacagagtc tcgctctgta acccaggctg gagtgcaatg 4741 gegeetteeg eeteetgggt teaagtgatt eteetgeete ageeteega gtagetggga 4801 ttacaggtgc ccaccaccac acccagctaa tttttgtatt tttagtagag acagggtttc 4861 accaggttgt caaggttggt ctcaaactcc tgacctcagg tgatccactc gcctcagact 4921 cccaaagtge tgggattaca ggcatgagee atggtgeeeg geeteagaat tteattttea 4981 acatgttttg catgatgggt gattttggag aatatttttt gctctatcgc aggatgatta 5041 agatgtggac aaggtgaagc cgatggaggg ggagctttga aagttacttg ctatttaatt 5101 gaggaactaa actgctttga gagcctgggg gtcagatcct ctgccttttc ctcctccca 5161 cctgcagtgc aaacatcaga caattgatca ctattgtatc ttggaggtgg gagtgaccat 5221 tgcagtgctg ggaccagaag atggcattgt atgtggaaca acaaagcact atttctagag 5281 actgcctgca gggatatgga aatagcttta tgtgtctcag aatgttcttc atacagctgt 5341 ttttattggg gaaattctac ttgccgaaaa gtttgatagt gagaccctct ccagtttgca 5401 gatttttctc cttcctgctc aacaacttcc tagctcagta actgcctctc ccaacaaact 5461 ccctcagttt caccacacca aaaaaggaag acaagccggt tgcggtggct cacacctata 5521 atcccaaaac tttgggaggc cgaggcgggt ggatccacct gaggtcggga gttcgagact 5581 agcetgacca acatggagaa accetgtete taetaaaaac acaaaattag eetggegtgg 5641 tggcgcattc ctgtaatccc agctgggagg ctgaggcagg agaatcgctt gaaccccgga 5701 ggcggaggtt gcagtgagcc aagatcgttc cattacactc cagtctgggc aagaaaagtg 5761 gaactccatc tccaaaaaaa aaaaaaaaa aacaaggaag acaaaaagaa aagcagctaa 5821 agactttgcc tcaggggaga aagttctctt ttgggttgct atccacattc caacctcctg 5881 ttcccacctc ttcgtctgca tgcctaagaa actgttttac aagtaaataa gggacgcttt 5941 gtctaggctt tggagccagg aagttgagac aaatttagga atgagatgaa gtaatggtat 6001 tattgcaagt ctcaggtgta actacctctg ctctttctct gaagagtttc taatttctct 6061 tgtttactta tttttttctt gtcatttttg ggattttatt actagttgtc tctaatcctt

F1G.18C

6121 totttaaatt ottoattatg aaacataaaa acaaatgoca ggogoggcag otcacgootg 6181 taatcccagc actttgggag gccgaagcgg gcagatcacc cgggtcagga gttcgagacc 6241 agcetgatea acatggagaa acceegtete tactaaaaaa tacaaaatta getaggegtg 6301 gtggcacatg ccagtaatcc cagctacttg agagactgag gcaggagaat cgcttgaacc 6361 gggaggcaga ggttgcggtg agccaagatc gcgccattgc actccagcct gggcaacaag 6421 agcaaaactc tgtctcaaaa aaaaaaaacc acatacaaac cagagataat attataatga 6481 gcctccaagt gcctaccacc ttgctgcagc acttgtcaat ccagggacca cccacctcac 6541 eggetececa eteattacea eceteceeta eteaattaet gaggtaaate etaggeagea 6601 tgatcatttc ttttttct ttttatttat tttgagacag gatctgtctc tgtcacccag 6661 gctggagtgt agtggcatat ctctgctcac tgcagcctct gcctcccggg cagaagccat 6721 cctcccacct cagcctacat agtagctggg accacaggca cacaccacca cacactgcta 6781 atgttttgta tttttgtag agactgggtt ttaccatgtt gatcaggctg gtctcaaact 6841 cctaggetea ageaateete eeacetegge eteccaaagt getagaatta eaggegegag 6901 ccactgcacc cagcgaagaa cactttttaa aaaataaata ggccgggcgc ggtggctcac 6961 acctgtaatc ccagtacttt gggagcccaa ggagggcgaa tcatgaggtc aagagattga 7021 gaccatccta agtaacatgg tgaaacccca tttctactac aaatacaaaa acaaaattag 7081 cctggcgtgg tggcaggcgc ctgtagtccc agctacttgg gagctgaggc aggagaatgg 7141 agtgaacccg ggaggcggag cttgcagtga gctgagatca tgccactgca ctccccctg 7201 gggcaacaga gtgagactcc caaaaaaaaa aaaaaaagcc cccctcccc acacaaata 7261 atataaataa ataaataacc acaatactat tatcacatct tacaaactca acaaaaattt 7321 cttaatatca tcaaataccc agtttgtgtt caaattttcc tgattgtttc ataaatatac 7381 tettacagtt ggtttetttt agegagatte aaatgagaee cacetgttga cetttgeeet 7441 tagggtttcc cagggtctga attttgttga cgacattccc atgttgctat gtaatacggt 7501 cctccatgcc ctgtgttttt ctgtaaactg atagatgtgg aggtgcaatg acatttgtgt 7561 ttgatttact ttggcaaata tagttcatca gtgatactct atacttcttg ttgctttaca 7621 teeggagget gataatgtet gettttetet ettttetaat tatttgtgaa aggaaaaatg 7681 tggggggttg ggagaaaaa accettaagt acatactege taaateacat tgctacaggt 7741 aacttccatt aagaacttga aagtaaaggt agctgcattt tcccctaggg aacacaatga 7801 tagacaggag cettagteta cagettgaag gattgtaatt atacetaage aaceeteetg 7861 gaccagttta atgttattag ctgtgatgta tecetacett tgatgteatt atecttaett 7921 ageteeetta aageagagat caagatgaaa agggetteag etgeageatg geacatggag 7981 attagagtgg ggcttttgga tgctgaggag cagacctaga atgggaaata gatgggagcc 8041 acagaagtga aggteeceet eceteattge teaacetaet ecacatetee aggtetgeae 8101 atctgttcag ttactgaatc ctgtgtaagc taccttcttt ttctttttc ttttatttat 8161 ttatttattt tttttttgag atggagtttt gctcttgtta cccaggctgg agtgcaatgg 8221 tgcaatctcg geteactgca ecetecaact eccaggttea tgcaattete eteceteage 8281 cttccaagta gctgggatta caggctgcac caccatgtct ggctaatttt tgaaaaatca 8341 gtagagagag ggtttcacca tgttggccaa gccggtctcg aactcctgac ctcaagtgat 8401 ccacccacct tggcctccca aaatgctggg attacaggtg tgagccacca tgcccgctgt 8461 aaactacctt cttaaaagct ctagaagagg gcttttaacc ttttgttgtg tgtcatgcac 8521 cttccgcaag ctgatgaagt tgatagaccc atctcagaat ttttttttt tttttgagac 8581 agtgtctcac tetgtcacce aggattggtt geagtggcae gateatgggt cattgeagee 8641 tecacetece aggeteaagt gateeteetg acteageete ttgaataget gagaceaeag 8701 gcttgtgtca ccatgcccag gtaattttta atttttttc gtagaggcag ggtctcacat 8761 tatgttgccc agtctggcct cgagaactcc tgggctcaag caatcttcct gccttgggct 8821 cccaaagtgg tgggattaca ggggagagcc accacacta gccaggagga tgttttaaat 8881 acaccaaata aaacatttat acccaaatac agttatccaa atattaaatt aacaagagtt 8941 agggtgaccc tattaattag tgtaatttcc aaatagtaat gaacataagt gatagtttga 9001 gatttctgtg acttttctaa tgtgacgtga aaatatttgt gatttttctt tttcttttt 9061 ttttttgaga tggagtttcg ctcttgttgc ccaggctgga gtgcaatggc aagatctcgg 9121 etcaceteaa ceteegeete etgggtteaa gegattetee tgeeteagee tettgagtag

F1G. 18D

ctgggattac aggactgtgc caccacgtcc agctaatttt gtatttttag tagaaacagg gtttctccat gttggtcagg ctggtcttga actcccaacc tcaggcgatc cgcccgcctc 9181 ggcctcccaa agtgctggga ttacaggtgt gagccaccgc acctggccaa tatttgtgat 9241 ttttattgac gacaaagtca aaggttctct tcatattatt gtggtgtatc gcctacaagc ataattaaaa taaacactaa atttcagttt aaagtttact gaaaataaat atgtattttt 9301 9361 tattccctat ttaagctttg aatcccctga cttcctatac cattaccact gtcctagttc 9421 aggttcatgt tgttttttac tttaattgtt atcacagtct cttaacattt ctccctatgt 9481 totocagtoc tgtaggtgct aaatotgacg tggtcacttc tcagettgga atcottcagt 9541 gcaccaccac agcettgaac tacatatttg aaatacatat ttattttcag taaactttaa 9601 actgaaattt agtgtttatt ttaattatgc ttgtaggcga tacaccacaa taatatgaag 9661 agaacetttg actttgtcgt caataaaaag teeettgagg ggaetteaga tgtaagteee 9721 ttagctgctc gttaaaactc ccccaggctg acccaataca caatcttgac tttaaaccac 9781 ttgtcattct aaatcactag catttcctgg aaaaaaaagc catttttcct tcagggctaa gctcagggac caattctgtg tcaccttctt tgaatcctga tgatattcac ttctttattt 9841 9901 gacctgattt attgggcccc agacaccatg ctgagtgttg gggattcagc tctggacaat 9961 gtcaaatgtc agtcctgcct ttcagatcct ttctactggg tgagccctgg agtgctggtt 10021 ctectegegg tgetgeetgt getecteetg cagateacte ttggeetegt ettectetge 10081 ctgcagtaca gactgagagg tacagggcag agggtgggtg gatcaggatc ctttctttaa 10141 atgagetgge ttettggage tacaceaett aacatgtatt tgtgagtgae ttettgggtte 10201 agaagttett eteactattg agtgataaag aaaaaaaata aeteeatgat gaaagagttt 10261 tacatettae ggaatgettt catatgaata ateggaeeta geattteeet atgagetaae 10321 tatgccatat agtaacccca ttttacagag gatacaactg aggccaggag tagttcagtg 10381 acttactcaa accgatataa cttataagtg gtagagctga ggcctctgta tcatacctag .10441 cagctccatg caacttggga gagtgtgagc ttcgaagtca gacaggtcta ggctattagg 10501 agttttgaat aaagatactg aagtgaaagt ctctaccaca cagtaggcgt tcgaaaattg 10561 tttcctcttt ctccattcaa cactgaggac tcaggttcag ctgctgatga agctcctctt 10621 ttttgcctag agctttcatt ctgagccttc tcctcctacc aagtgtctcc ccaatgccag 10681 agcaggaaga gtcttcactc ctcccaatgc cccacctccc atttgttact aagaggagag 10741 gagaaagtag caaggagggt atggggaatg ttctggggga atgggtgttg gtgcgatcaa 10801 caacaaagtc ctttctctca ccttgaattc atcccagatg cctgcttgtt tacttcttcc 10861 acacaaaaaa aggcettcag ccctcatggc tgagcagaaa gaatctgaat gttagagtca 10921 ggcagcctgg gtttgaattc catctcaggt actgaactct atagcaaaat tettagattc 10981 tccaagette agttgccttg tctgtcaaat agagaaaaca tccttcgtcc taaattgtag 11041 ggaggattaa agtcatgcaa agtgcctact acaaatccag tcacaaagta gctagctact 11101 cactaaatgt tcagetcete ceteeteatt cagatgggaa gtggetttag ataaacaaag 11161 tggcaacgca gtgggctgga gcagctctgt gaactgagaa tccaagaaaa ggggcgaaga 11221 gcagctggga tgtattggat gcttgtgctg gcttggagca ttgctcacat tctttattcg 11281 ctattgtatc tagactatag ctagagaaag agccgcaacc attggcttta aatccagtgc 11341 tetteetaet eteetgaggt tgttteeagg etgeagagaa atageetgea caaggggeee 11401 aggegetggg tgtgggaggg tececacega gagecagaac atgeaggaac taaaatgttg 11461 cotttttcta ttttaggaaa acttcgagca gagataggtg agttccagtc atcgtttctc 11521 ccaattettg cettttggtt ttttggcata acggaaatgg teccattett ggacegtete 11581 teceteteaa taccetgttt teceeteagt tteeetttet etacagtggg tgtgtegtge 11641 ctagaacaag ttttaagtaa ttaaataaca aagactcagg ataaaaggat cctttttgga 11701 gtgccctact aaatccattt ccatttgttt ctctttcaga gaatctccac cggacttttg 11761 gtaagtteeg geatgtetag geeeteecag gteaacttgg tattteacte tagtteeagt 11821 cacctggggg aacaaggacc cctggctcct ggttgagtcc cttcctctct tctctttct 11881 ttotttaaat aagaagtoat ttgoatttag gattggtaaa atcataataa aaatactoat 11941 gtactgtttt tatgtgccag gcactattct aactacttta caaaaacgtt atcttattct 12001 gtttaactcc ttatgcacat gatctctctt ttcaggaatg ccaaaacaga ggtaaataga 12061 togtttacac gtaaacctga tgtctggttg gggaggtgaa acaaacagaa acaagacaca 12121 12181

FIG. 18E

actgtatcac ctgtacttat atttctgctt tacaaactca ggatgtttcc atgagtacag aacatgacta atcagagaag acctcataga ggaatagaaa agccaccaag ccccactagg 12241 aattgacccc tcaaggacat ggtttctagc ctttttgttc actgcagatt gcccaatgcc 12301 taaagataat ggcaacagaa gagcacccaa atatttgtta gataaatgtt gcagacacta 12361 gaaggtgtca ttagggcaca gatggtacct tctctgagca aacttccttc acagctcctc 12421 ctcccgaggc tgtaggtgac tctactcttg tcacctggca cacagagttc tatcgtacga 12481 tttaggaaat tagaccagtg tgtggaccac acacacaca atctttacac acccaaagag 12541 gaggaatagt atctttgttt tggaggactt gactatgaaa ggtcttaact cctttttgta 12601 ccatgaatct ctctggcact ccagtgaagt ctaaaggacc cctttgcaga atgtttttaa 12661 atatacacat aaaatagaac acataggatt gcaaaaacaa tcattgtact aaaatacagt 12721 tatcaaccga taatcacatt tgtgatatag taacataaat gtttctttt ttttttttg 12781 gaggcagagt ttggctcttg tcacccaggc tggagtgcaa tggcgcgatc taggctcact 12841 gaaacctctg cctcccgggt tcaagcgatt ctcagcctcc tgagtagctg ggattacagg 12901 tgcccgccac cacacccage taatttttgt atttttagta gagactaggt ttcaccaggt 12961 tggccagget ggcctcgaac tectgacete aggtgateca eetgeettgg eeteccaaag 13021 tgctgggatt acgggcatga gccaccgtgc ccggccataa atatttcttt agccaaagta 13081 atacattaag taatgtagca gcaagtctaa taacctgtaa tttctttctt tctttcttc 13141 tttctttttt tttgagatga agtttttttg agatggagtg caatggcaca atctcggctc 13201 actgcaacct ccacctcctg ggttcaagcg attctcctgc ctcagcctcc caagttgctg 13261 gaactacagg cgcatgccac catgcccagc taatttttgt atttttagta gagacggggt 13321 ttcaccatgt tggccagget ggtcttgaac ccctgacctc aggtgatctg cctgccttgg 13381 ccttccaaag tgctgggatt acaggcatga gccaccaggc ccagcccaat aacctttaat 13441 ttcaacatac taataaacat aaacagtatt tcaagatttc tgcaataact ctaatgggaa 13501 tgaaaacatc tgtggcttcc attggtaatt aagtcacagg tactgctcat attgtggtta 13561 gttgtaaaat gttttggttt gttttgtttt ttccaagact tgggggaatg ggtgttggtg 13621 ggatcaacaa gagtettget etgtggeeca ggetggagtg eaggggeagg atettggete 13681 actgcaacct ccgcctccca ggttcaagcg attctcctgc ctcagcctcc tgagtagctg 13741 gcattacagg catgtgccac cacgcccagc taatttttac atttttagta gagatggggt 13801 ttcaccatgt tggcctggct ggtcttgaac tcttggcctc atgatccacc cgtctcggac 13861 teccagagtg ttgggattae aggeatgage caccacacet ggeagttgtt acatttttaa 13921 tgaaagaaaa tgttaaatcc agttattgaa aataaggagg cagtactttt ctcatccaag 13981 ttcatggact ttctgaattt tgtccccaga gtcctttggt gttctaggac cccaggttaa 14041 ggaacccaaa aagacaggtg ggtggggcat gagggggaac acatgttaat ccctgtttgt 14101 tctggtgaac aattcagatc cccactttct gagggtgccc tgctggaaga taaccctgtt 14161 tgtaattgtg ccggttcttg gacccttggt tgccttgatc atctgctaca actggctaca 14221 tcgaagacta gcaggtgcag tggctgggca gcaggcaaga ccaccaaata gtgggggacc 14281 aagtcagctc tgaatgggaa gccaaaagag aatagaacca ggactcaaga ttaggggagc 14341 tgggatttcc ttattcctct gtccccatgc ccaaccccag gctcttctga gaaactgtga 14401 agagaaccac ttactggatc tgtgggatcc cccagtggaa agggcagtgt gggtcactcc 14461 aaatgtccat agggaggatg tggggaaggt gctattcatc ttccactaat cacatatttg 14521 tttctttttg ttttcagggc aattccttga agagctacgt aagttctctt ctctctgtta 14581 taagcagaga ataaaaagcc aggaaaggga gacagaagca acaagaggaa gaggcgggct 14641 attgagggat cacattccca gaggaaagga ggagctggag agcctgggtg gagggaagac 14701 tcctcctggg aggtagaggg caaagaagcc agctgttaga gacacattta caggtggcag 14761 agaagctgga ggcactccta tctgccacct gatccattcc tccttcactg cccctaagca 14821 ggaatccaac cctagctggt ctcattgccc attccacagc aactgcccag tgcctcacct 14881 ctcagatcaa ccattgaggc aggaatggag acaagatgac cccaagggct tttcttctcc 14941 ctagttcaat ggttttatga tacaaactac tgacatacgt ttttcaagtt attttctcct 15001 tottotagga aatooottot gagtgatgto acatottggo aggggtggag gagagootgg 15061 ttgcccaggg atttgtcctt ggggacatct catccatcaa gttgcacact cactggcatc 15121 tttgctatgg ggacattcca atttgcactt tcaggaacac tctgaattcc aagtagaatt 15181 15241

F1G. 18F

gatttccctt cttctgtcat ctaccttttc tcttcatttt cccattttta ttacccttct ttccatttct ctctccagtc ttccacctgg aagecctctc tggctaagga caggcaggtg 15301 cccctctctc catcagagga cacctgtact ggagagcaac acaggatggt ctctgccatg 15361 aactggaggc caggaatctc ctcactgaaa attacagtat ggtaactttg caaatggtgg 15421 15481 aagaggaaga gtgcaaaaca ttgaagagag agctgagtga gctgaagagt gaggatatga 15541 gtagccccaa cccaaacctg gagatgggga gaaacctaca gaatactagc cagagctcct 15601 cettgtettg geageetact agggaeetgg ggaageaaaa aegaaagetg ggeaaeatge 15661 ctgctttaga atgttttcct tctacttaca catcttccac aggtctcaga atctttcctt 15721 cototoatoo ttttotoota totacatato tatoagagta tocactgttt attoaacaac 15781 tactacttga tggtcagaca caaacaaaca agctaggtgc taattaataa agatacgagt 15841 tttggccggg tgcggtggct cacgcctgta atcccagcac tttgggaggc cgaggcgggc 15901 gaatcacgag gtcaggagtt caagaccagc ctggccaaca tggtgaaacc ccatctctac 15961 taaaaataca aacaattaac tgagcatagt ggtgggcacc tataatacca gctactccgg 16021 aggetgagge aggagaateg ettgaaceea ggaggeagag gttgeagtga getgagateg 16081 egecactgea etetageegg agtgacagag taagaetetg teteaaaaat aaataaataa 16141 16201 totaacccct tgtettttat gtattteett eettateeac geaectgtet eectetacte 16261 cagecteatt accecagagg teagteetea ggaaaaetaa acacaaagaa agageteagt 16321 cagaaaggcc atttatttat gtttcaagat gctcactgcc tcctttgttt tgtctccttt 16381 geaggeette tetettagge etetteteet gggggtatgg atcetggggg gagattgate 16441 16501 ctggcccagg atcacccggc atttatggtg gctgctctgg cacaggtcct tgcctttata 16561 gecectecag tgatecataa ggeeetettt eteeccaaag gagaggteae agatagggea 16621 aaggtagete ttetgettee agtgggtetg etggtgtetg accageetgg aaaatgaget 16681 gaaagacttg ctgcaatgga agcagtagtt gggcggctct gtgaggtggc ccttctggtg 16741 totggagaga taggatttot tgotaaaagt caaagaacaa tgggggcaac agaagacatt 16801 gagtettgag ggetteactg gatgagagtt ggatetggea teetgacaga gggttecagt 16861 gatgggtgcc tgggtcctgg tcacaggtgc ttggttctta agtacagatg cctggttctg 16921 ggccatagga ccctcagttc taaatatggg ttcctgggac ctggccactg gtgcatggtt 16981 cacatccaaa agcccctgga tggacctctg gettctggcg atgggtgtct ggaattcagc 17041 ctgggtgcct ggaatcctca aagtacactc ctggtttcca tccactggct cctggttttg 17101 gtgtatette tggtggegtt tgageteaga etggteeegg aagetettee cacacaga 17161 gcatgaatgg ggceggtaac ccagatggac gcggeggtga cgacttagtc cagaagcatc 1.7221 acagtaggte ttgtcacaga gegtgcaaca gaagggeete teeccaagat geatgegtet 17281 gtgatagctg agggacttgg ggctccgaaa caacttccca cactgactgc agctgttagt 17341 cagettggga ttgtgaacaa actggtgget atagaggtag gagegeetge tgaaacattt 17401 17461 ggcacaggtg tagcaaaa 17521

FIG. 19

F1G.21

1 masqkrpsqr hgskylatas tmdharhgfl prhrdtgild sigrffggdr gapkrgsgkd 61 shhpartahy gslpqkshgr tqdenpvvhf fknivtprtp ppsqgkgrgl slsrfswgae 121 gqrpgfgygg rasdyksahk gfkgydaqgt lskifklggr dsrsgspmar r

F1G.22

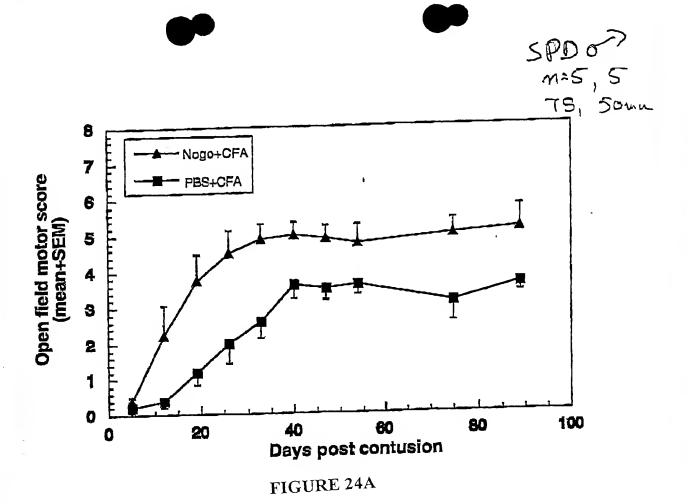
mglleccarc lvgapfaslv atglcffgva lfcgcgheal tgtekliety fsknyqdyey 61 linvihafqy viygtasfff lygalllaeg fyttgavrqi fgdyktticg kglsatvtgg 121 qkgrgsrgqh qahslervch clgkwlghpd kityaltvvw llvfacsavp vyiyfntwtt 121 cqsiafpskt sasigslcad armygvlpwn afpgkvcgsn llsicktaef qmtfhlfiaa 121 fvgaaatlvs lltfmiaaty nfavlklmgr gtkf

F1G.23

1 maslsrpslp sclcsflll llqvsssyag qfrvigprhp iralvgdeve lpcrispgkn 61 atgmevgwyr ppfsrvvhly rngkdqdgdq apeyrgrtel lkdaigegkv tlrirnvrfs 121 deggftcffr dhsyqeeaam elkvedpfyw vspgvlvlla vlpvlllqit lglvflclqy 181 rlrgklraei enlhrtfdph flrvpcwkit lfvivpvlgp lvaliicynw lhrrlagqfl 241 eelrnpf

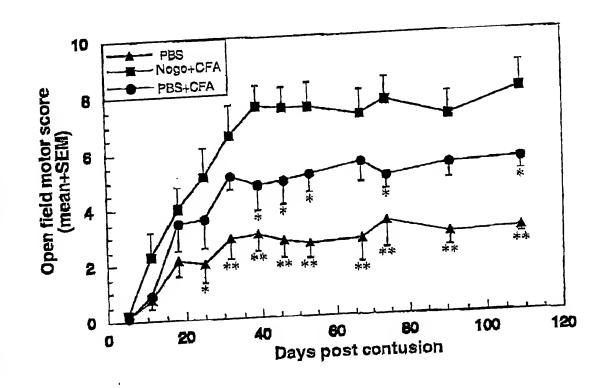
F1G.20

-	tataaat	acticctcatic	gcctcactgt	acttcacgga	agagacttgg	Ligadigged
1		~~~+~~~~~~~	adattcccaa	CLCayayaya	cegagees	J J
61		~~~t~~t=tt	ccttaccacc	Claccinate	cccggaca	J
121			FACCEDARIO	CCCLCGLCCA	LCCCag oo	-5.555
181		L t ~ a a a	- EEECGACIII	CCGGGGGGG	ccagacogg	-5 -55
241			- ECCCEACCCC	addadctacc		
301		+ ~~+ ~~~ ~~~	aaace eccau	auticutages	9000300	
361	4	aaataat	tataaaaacacu	CLUAUCCCLY	49665555	_
421		- aataaaaaa	ctacaaccau	Lacaccitic	cggagcacas	- 5
481			- cataaraccc	ccayaayuyy		,,,,,
541		+ ~~+ ~~~~~~	caactgccca	daddluduguu	cegageegas	33 333
601	and the second s	L ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Cartrectu	datedaceac	99945545	55
661		at a at a c a	- attagtacct	actagagagg	CCaacgg	
721			Caccaccttd	Caulluagg	q c cacgooag	
781			adataat.	LCCLCLGLGGG	aggecaeeg	
841		~-~~~~	-tracarcaac	CCCCCCCCC		
901		F~2~~~~~~	antractaaa	agectquace	Lggaccugg.	
961		- ~~~~~tata	- Fact Faccua	ucayayaayy	CCCGGGGG	
1021		aaataat	atatacacci.	Luddaddcca	cagegaacgs	9
1081		aaaaa	CECCAECCEG	Lullucatat	agageaacc	33
1141		+ ~~~~~~~~	acadaEccEd	accacyguea	cccacgagag	
1201		aaataaa	acccaaggac	uatuuuuau	4669969	<i>3</i>
1261			caccttcaac	Clatterage	agecage	
1321			aaccadadac.	acculucase	900090505	J J
1381			ctttaaacta	CCLLCCCGCa	acgegaces	J U
1441		++~+~+~a+c	ararrracarc	addiction	ccaccago	
1501	1	~~~~~~~~~	arccaaatt	attlytact	ccaggaace	55
1561		-~ataccttt	ccaddaadca	Caccyactya	cgcgggccaa	
1621		+ + accatt	- Faccaticeta	alluccatus	Leagua	
1681		aart aaa	⇒ dadadcccc	additionag	cgggagaca	
1741			aardroogga	qualityalu	ageaegagg	J J -
1801		aaaaaaat	actadaccii	aggggggaac	Cccagaac	J J
1861	ctggggtccg	agaggagget	gaaacgaccc	accaaggaca	gctacaccct	gacagaggag
1921	tattcccact	cayacceggg	ccaaatcaaa	tga		
1981	ctggctgagt	acycayaaac	ccgagtcaag	J		



3 PD 07 79 25mm Nogo+CFA Open field motor score (mean+SEM) PBS+CFA Days post contusion

FIGURE 24B



SPD females (n=5), 50mm T9 contusion, CFA 1mg/ml after the contusion, boost with IFA 7 days later.

t-test: *P< 0.05, **P<0.01 compared to Nogo+CFA